REMARKS/ARGUMENTS

These remarks are made in response to the Office Action of October 05, 2005 (Office Action). This response is filed after the 3-month shortened statutory period along with an appropriate extension fee.

In paragraphs 2-3 of the office action claims 11 and 20 have been rejected under 35 U.S.C. §101 for non-statuary subject matter. The claims have been amended as suggested to overcome this rejection.

In paragraphs 4-5 claims 1, 3-5, and 22 have been rejected under 35 U.S.C. § 102(e) as being unpatentable over U.S. Patent No. 6,853,988 to Dickinson, *et al.* (Dickinson).

In paragraph 6, claims 2 and 11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dickinson in view of U.S. Publication Number 2001/0042143 to Ooba, *et al.* (Ooba).

In paragraph 7, claims 6, 8-9, 12-17, and 19-21 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dickinson in view Ooba in further view of U.S. Publication Number 2002/0136406 to Fitzhardinge (Fitzhardinge).

In paragraph 8, claims 7, 10, and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dickinson in view Ooba in further view of Fitzhardinge in further view of U.S. Patent Number 6,249,866 to Brundrett, *et al.* (Brundrett).

Applicants have amended independent claims 1, 9, and 22 to clarify that each claimed granular portion of data has a smaller bit size than the data set, as supported by paragraphs 0023, 0027, 0033, and throughout the application. No new matter has been added.

The Applicants' claimed invention is designed to solve security issues with digitally stored information by storing digital information across an array of storage spaces in such a manner that none of the individual storage spaces contains information sufficient to pose a security threat. The claimed storage is to occur at a level of

granularity below a level necessary to retrieve comprehensible information (paragraph 0004). Granular portions of data can be bit or byte portions of words from paragraphs 0023 and paragraph 0027. These granular portions (77-82 from FIG. 6) of a datype (70 from FIG. 6) can be placed in separate data stores (57-62 from FIG. 6).

For example (see paragraph 0027), a string data type including a social security number "123-45-6789" can be separated into four granular portions ("123"; "45"; "67", and "89") each of which can be placed in a separate data store. Metadata (FIG. 2B) can be used to recombine the granular portions. It should be emphasized that each "granular portion" is a decomposed piece of larger data set. That is (from paragraph 0059), "the size of the elements in bits (i.e. the level of granularity) should be sufficiently small to ensure that elements in a queue or any portion thereof do not have any sensitive or useful informational context."

Claims 1, 3-5, and 22 have been rejected under 35 U.S.C. § 102(e) as being unpatentable over Dickinson. Dickinson teaches that cryptographic keys and/or authentication data are to be processed by a data splitting module (520 and 610). Results from the data splitting module are stored in different data stores (FIG 7). Reconstruction of keys can occur using data assembly modules 520 and 620.

There is a superficial similarity between the Applicants' claimed invention and that of Dickinson in that both inventions attempt to enhance security using multiple data stores. The manner in which Dickinson and the Applicants provide enhanced security using multiple data stores is entirely dissimilar.

Dickenson's method is detailed between column 16, line 60 and column 18, line 35. Specifically, Dickinson teaches that two or more ciphers (A and C) are to be automatically generated for an original cryptographic key (S). A is combined with S to generate partial key B (using A XOR S). C is combined with S to generate partial key D (using C XOR S). Notably, A, B, C, D and S are presumed to have the same number of bits. In order to re-obtain (assemble) the original cryptographic key (S), at least two of

A, B, C, and D are needed (specifically A and B or C and D are needed). Pairs of partial keys can be stored in different data stores such that none of the stored pairings are able to be recombined to form S as noted at column 17, lines 25-30.

Turning to claims 1 and 22, Applicants specifically claim that successive granular portions of data in a data set are dispersed into multiple stores. Applicants also claim that each granular portion has a smaller bit size than the data set. Dickenson fails to explicitly or inherently teach this claimed limitation. Appreciably, Dickenson's teachings are contrary to this claimed limitations in that each stored portion (each partial key A-D) of Dickenson is actually larger (a larger bit size by a factor of approximately two) than the original cryptographic key (S).

Since each claimed limitation is not explicitly or inherently taught by Dickenson, Applicants respectfully request that the 35 U.S.C. § 102(e) rejections to claims 1, 3-5, and 22 be withdrawn.

Claims 2 and 11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dickinson in view of Ooba. Ooba fails to cure the deficiencies of Dickinson. Ooba is cited for teachings relating to a block queuing structure. Dickinson, Ooba, and combinations thereof fail to teach or suggest that smaller portions of a larger data set are to be stored in different data stores as claimed.

Claims 6, 8-9, 12-17, and 19-21 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dickinson in view Ooba in further view of Fitzhardinge. Fitzhardinge is cited for teachings relating to metadata utilization. Dickinson, Ooba, Fitzhardinge, and combinations thereof fail to teach or suggest that smaller portions of a larger data set are to be stored in different data stores as claimed. Applicants note that independent claim 13 includes this limitation.

Claims 7, 10, and 18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Dickinson in view Ooba in further view of Fitzhardinge in further view of Brundrett. Brundrett is cited for teachings relating to encrypting metadata. Dickinson,